

JUN 30 2005
 PATENT & TRADEMARK OFFICE

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: June 30, 2005 (use as many sheets as necessary)				Complete if Known	
				Application Number	10/757973
				Filing Date	01/13/2004
				First Named Inventor	Jun XIE
				Group Art Unit	3746
				Examiner Name	Charles G. Freay
				Attorney Docket Number	049411-0253
Sheet	1	of	1		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.		
Car	B1	SHIH, J., et al., "Surface Micromachined and Integrated Capacitive Sensors For Microfluidic Applications", Transducers 2003, USA, pp. 388-391 (2003).		
Car	B2	XIE, J., et al., "Integrated Surface-Micromachined Mass Flow Controller", MEMS 2003, Kyoto, Japan, pp. 20-23 (2003).		

Examiner Signature	Freay	Date Considered	8/18/05
--------------------	-------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PTO/SB/08A (08-03)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete If Known	
		Application Number	10/757,973
		Filing Date	January 13, 2004
		First Named Inventor	Xie, Jun
		Art Unit	Unassigned
Examiner Name	Unassigned		
Attorney Docket Number	020859-002510US		
Sheet	1	of	2

U.S. PATENT DOCUMENTS+						
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
CAR	1	US 5,836,750		11-17-1998	Cabuz	
	2	US 6,033,191		03-07-2000	Kamper et al.	
	3	US 6,062,256		05-16-2000	Miller et al.	
	4	US 6,109,889		08-29-2000	Zengerle et al.	
	5	US 6,124,632		09-26-2000	Lo et al.	
	6	US 6,126,140		10-3-2000	Johnson et al.	
	7	US 6,149,123		11-21-2000	Harris et al.	
	8	US 6,206,022	B1	03-27-2001	Tsal et al.	
	9	US 6,240,962	B1	06-06-2001	Tai et al.	
	10	US 6,277,257	B1	08-21-2001	Paul et al.	
	11	US 6,408,878	B2	06-25-2002	Unger et al.	
	12	US 6,536,213	B2	03-25-2003	Tai et al.	
	13	US 6,568,910	B1	05-27-2003	Parce	
	14	US 6,572,749	B1	06-03-2003	Paul et al.	
CEA	15	US 6,626,416	B2	09-30-2003	Sharma et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				

Examiner Signature	Fraun	Date Considered	8/18/05
-----------------------	-------	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

60186224 v1

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete If Known	
				Application Number	10/757,973
				Filing Date	January 13, 2004
				First Named Inventor	Xie, Jun
				Art Unit	Unassigned
				Examiner Name	Unassigned
Sheet	2	of	2	Attorney Docket Number	020859-002510US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CYE	16	DEGANI et al., On the Effect of Residual Charges on the Pull-In Parameters of Electrostatic Actuators, Sensors and Actuators A 97-98 (2002), pp 563-568.	
	17	DUBOIS et al., Electrostatically Actuated Gas Microvalve Based on A Ta-Si-N Membrane, Institute of Microtechnology, University of Nuchatel, Switzerland, 2001, pp 535-538.	
	18	GALAMBOS et al., A Surface Micromachined Electrostatic Drop Ejector, Transducers 2001, Munich, Germany.	
	19	GROSJEAN et al., A Thermopneumatic Peristaltic Micropump Transducers, 1999, pp 1776-1779.	
	20	JUDY et al., Micromechanical Membrane Pump, MEMS 1991, pp 182-186.	
	21	KOVACS, G.T.A., Micro Machined Transducers Sourcebook, McGraw-Hill, 1998.	
	22	SETHU et al., Polymer Based Actuator for Nozzle-Diffuser Pumps In Plastic Microfluidic Systems, 2002, pp 232-328.	
	23	TSAI et al., A Thermal Bubble Actuated Micro Nozzle-Diffuser Pump, MEMS 2001, pp 409-412.	
	24	WU et al., Electrochemical Time of Flight Flow Sensor, Sensors and Actuators, A 97-98 (2002), pp 68-74.	
	25	VANDELLI et al., Development of a MEMS Microvalve Array for Fluid Flow Control, Journal of Microelectromechanical Systems, Vol. 7, No. 4, December 1998, pp 395-403.	
	26	WIJNGAART et al., A High-Storke, High-Pressure Electrostatic Actuator for Valve Applications, Sensors and Actuators, A 100 (2002), pp 264-271.	
CYE	27	YAO et al., Dielectric Charging Effects on Parylene Electrostatic Actuators, IEEE, 2002, pp 614-617.	

Examiner Signature	<i>FF</i>	Date Considered	8/18/05
-----------------------	-----------	--------------------	---------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.